CLAIMS

1. An eye wash station comprising:

a source of eye wash fluid;

a spray nozzle; and

a movable conduit defining a flow path between the source of eye wash fluid and the spray nozzle;

the flow path being closed to fluid flow when the conduit is in a first position and being opened to enable the eye wash fluid to flow to the spray nozzle by movement of the conduit from the first position to a second position.

2. The eye wash station as claimed in claim 1 wherein:

the source of eye wash fluid, the spray nozzle and the conduit are disposed in a housing.

3. The eye wash station as claimed in claim 1 including:

a membrane for closing the flow path; and

a membrane piercing element disposed for engagement with the membrane upon movement of the conduit.

4. The eye wash station as claimed in claim 3 wherein:

the membrane piercing element is structured and dimensioned to puncture the membrane and to move the membrane out of a fluid interfering position and to maintain the membrane in a non-interfering position enabling the eye wash fluid to flow to the spray nozzle.

5. The eye wash station as claimed in claim 3 wherein:

the membrane is connected to the conduit and the membrane piercing element is connected to the nozzle.

6. The eye wash station as claimed in claim 5 wherein:

the nozzle and the piercing element are stationary during movement of the conduit.

7. The eye wash station as claimed in claim 4 wherein:

the membrane piercing element is cylindrically shaped with a sharp edge.

8. The eye wash station as claimed in claim 1 including:

a retainer clip removably mounted to the conduit for maintaining the conduit in the first position.

9. The eye wash station of claim 1 including:

a housing having a movable tray;

the source of eye wash fluid being mounted in the housing; and

the spray nozzle being mounted on the tray.

10. The eye wash station as claimed in claim 9 including:

a support structure to which the housing is mounted, the support structure also supporting the source of eye washing fluid.

11. The eye wash station as claimed in claim 9 including:

a handle mounted to the tray for moving the conduit from the first position to the second position.

12. The eye wash station as claimed in claim 11 including:

a connector assembly connected to an end portion of the conduit;

the membrane being mounted to the connector assembly; and

the connector assembly being structured and dimensioned to operatively engage the handle.

13. The eye wash station as claimed in claim 11 wherein:

the tray is pivotal and supports the nozzle, the handle and the movable conduit; and

the tray is movable between a generally vertical closed position and a generally horizontal open position.

14. The eye wash station as claimed in claim 13 including:

a latch structure engaging the tray for maintaining the tray in the generally vertical closed position.

15. The eye wash station as claimed in claim 14 including:

a clip mounted to said housing for engaging said latch structure.

16. The eye wash stations as claimed in claim 14 wherein:

the latch structure is a lock arm;

the handle and the lock arm pivot together; and

the lock arm pivots independently of the handle.

17. The eye wash station as claimed in claim 16 wherein:

pivoting the handle and the lock arm enables the tray to move from the generally vertical closed position to the generally horizontal open position and causes the membrane to be punctured.

18. The eye wash station as claimed in claim 17 wherein:

the handle and the lock arm pivot from between 12 and 18 degrees to cause the membrane to be punctured and the tray to be released from the generally vertical, closed position.

19. The eye wash station as claimed in claim 18 wherein:

the handle and the lock arm pivot about 14 degrees to cause the membrane to be punctured and the tray to be released from the generally vertical closed position.

20. The eye wash station as claimed in claim 17 wherein:

the membrane piercing element is structured and dimensioned to puncture the membrane and to move the membrane out of the fluid interfering position and to maintain the membrane in a non-interfering position.

21. The eye wash station as claimed in claim 20 including:

a support structure to which the housing is mounted, the support structure also supporting the source of eye wash fluid.

22. The eye wash station as claimed in claim 21 including:

a connector assembly connected to an end portion of the conduit;

the membrane being mounted to the connector assembly; and

the connector assembly being structured and dimensioned to operatively engage the handle.

23. The eye wash stations as claimed in claim 22 including:

a clip mounted to said housing for engaging said lock arm.

24. The eye wash station as claimed in claim 23 including:

a retainer clip removably mounted to the conduit for maintaining the conduit in the closed position before the spray nozzle is mounted to the tray.

25. The eye wash station as claimed in claim 24 wherein:

the source of eye wash comprises a bag having resilient side walls, a mounting structure and a spout.

26. An eye wash station comprising:

at least one bag providing a source of eye wash fluid;

a spray nozzle; and

a conduit defining a flow path between the source of eye wash fluid and the spray nozzle;

the flow path being closed to fluid flow when the conduit is in a first position and being opened to enable the eye wash fluid to flow to the spray nozzle by movement of the conduit from the first position to a second position.

27. The eye wash station as claimed in claim 26 wherein:

the bag, the spray nozzle and the conduit are disposed in a housing.

28. The eye wash station as claimed in claim 26 including:

a membrane for closing the flow path; and

a membrane piercing element disposed for engagement with the membrane upon movement of the conduit.

29. The eye wash station as claimed in claim 28 wherein:

the membrane piercing element is structured and dimensioned to puncture the membrane and to move the membrane out of a fluid interfering position and to maintain the membrane in a non-interfering position enabling the eye wash fluid to flow to the spray nozzle.

30. The eye wash station as claimed in claim 28 wherein:

the membrane is connected to the conduit and the membrane piercing element is connected to the nozzle.

31. The eye wash station as claimed in claim 30 wherein:

the nozzle and the membrane piercing element are stationary during movement of the conduit.

32. The eye wash station as claimed in claim 29 wherein:

the membrane piercing element is cylindrically shaped with a sharp edge.

33. The eye wash station as claimed in claim 26 including:

a retainer clip removably mounted to the conduit for maintaining the conduit in the first position.

34. The eye wash station of claim 26 including:

a housing having a movable tray;

the source of eye wash fluid being mounted in the housing; and

the spray nozzle being mounted on the tray.

35. The eye wash station as claimed in claim 34 including:

a support structure to which the housing is mounted, the support structure also supporting the bag.

36. The eye wash station as claimed in claim 34 including:

a handle mounted to the housing for moving the conduit from the first position to the second position.

37. The eye wash station as claimed in claim 36 including:

a connector assembly connected to an end portion of the conduit;

the membrane being mounted to the connector assembly; and

the connector assembly being structured and dimensioned to operatively engage the handle.

38. The eye wash station as claimed in claim 36 wherein:

the tray is pivotal and supports the nozzle, the handle and the movable conduit, and

the tray is movable between a generally vertical closed position and a generally horizontal open position.

39. The eye wash station as claimed in claim 37 including:

a latch structure engaging the tray for maintaining the tray in the generally vertical closed position.

40. The eye wash station as claimed in claim 38 including:

a blocking element mounted to said housing for interferring with movement of said tray from said open position to said closed position.

41. The eye wash stations as claimed in claim 38 including:

a latch structure having a lock arm;

the handle and the lock arm pivot together; and

the lock arm pivots independently of the handle.

42. The eye wash station as claimed in claim 41 wherein:

pivoting the handle and the lock arm enables the tray to move from the generally vertical closed position to the generally horizontal open position and causes the membrane to be punctured.

43. The eye wash station as claimed in claim 42 wherein:

the handle and the lock arm pivot from between 12 and 18 degrees to cause the membrane to be punctured and the tray to be released from the generally vertical, closed position.

44. The eye wash station as claimed in claim 43 wherein:

the handle and the lock arm pivot about 14 degrees to cause the membrane to be punctured and the tray to be released from the generally vertical closed position.

45. The eye wash station as claimed in claim 44 wherein:

the membrane piercing element is structured and dimensioned to puncture the membrane and to move the membrane out of the fluid interfering position and to maintain the membrane in a non-interfering position.

46. The eye wash station as claimed in claim 45 including:

a support structure to which the housing is mounted, the support structure also supporting the source of eye wash fluid.

47. The eye wash station as claimed in claim 46 including:

a connector assembly connected to an end portion of the conduit;

the membrane being mounted to the connector assembly; and

the connector assembly being structured and dimensioned to operatively engage the handle.

48. The eye wash stations as claimed in claim 47 including:

a blocking element mounted to said housing for interfering with movement of said tray from said open position to said closed position.

49. The eye wash station as claimed in claim 48 including:

a retainer clip removably mounted to the conduit for maintaining the conduit in the closed position before the spray nozzle is mounted to the tray.

50. The eye wash station as claimed in claim 49 wherein:

the bag has flexible side walls and includes a mounting structure for mounting the bag in the housing and a spout for dispensing eye was fluid from the bag.

51. A kit for use in storing and dispensing eye wash fluid in an eye wash station comprising:

an eye wash fluid storage element; and

a movable structure defining a flow path for dispensing the eye wash fluid from the storage element:

the flow path being closed to fluid flow when the movable structure is in a first position and being opened by movement of the movable structure to a second position to enable the eye wash fluid to flow from the storage element through the flow path.

52. The kit as claimed in claim 51 including:

a removable retainer clip for maintaining the movable structure in a fixed position prior to use.

53. The kit as claimed in claim 51 wherein:

the movable structure is a conduit.

54. The kit as claimed in claim 53 including:

a spray nozzle connected to the conduit.

55. The kit as claimed in claim 53 including:

a membrane connected to the conduit for closing the flow path; and

a membrane piercing element disposed for engagement with the membrane upon movement of the conduit.

56. The kit as claimed in claim 55 wherein:

the membrane piercing element is structured and dimensioned to puncture the membrane and to move the membrane out of a fluid interfering position and to maintain the membrane in a non-interfering position enabling the eye wash fluid to flow upon movement of the conduit.

57. The kit as claimed in claim 55 wherein:

the membrane piercing element is connected to a nozzle.

58. The kit as claimed in claim 55 wherein:

the membrane piercing element is cylindrically shaped with a sharp edge.

59. The kit as claimed in claim 51 wherein:

the storage element is a bag assembly.

60. The kit as claimed in claim 59 wherein:

the bag assembly includes at least one storage bag.

61. The kit as claimed in claim 58 wherein:

the storage element is a bag assembly; and

the bag assembly includes at least one storage bag.

62. The kit as claimed in claim 61 wherein:

the storage bag includes a spout connected to the movable structure.

63. The kit as claimed in claim 61 wherein:

the storage bag has a structural top of rigid plastic and lower resilient sheets;

the structural top includes a pair of outer vertically oriented slots and an inner pair of horizontally oriented slots to facilitate gripping and lifting the bag.

64. The kit as claimed in claim 63 wherein:

the resilient sheets are made of a polyolefin film having a thickness of about 0.014 inches.

65. The kit as claimed in claim 64 wherein:

the polyolefin film provides a pressure on the eye wash fluid inside the bag to help enable a generally constant flow of fluid from the bag during use at a rate of about one and a half liters per minute during a fifteen minute period and to help cause the fluid to be substantially evacuated from the bag.

66. The kit as claimed in claim 63 wherein:

the storage bags and tops are about nineteen inches high and twenty-one inches wide when empty.

67. The kit as claimed in claim 61 wherein:

the storage bags contain about twenty-two and a half liters of sterile, sealed eye wash solution.

68. An eyewash bag assembly comprising:

a bag structured and dimensioned to provide an essentially constant flow of eyewash fluid when the bag is disposed in an eyewash system at a rate of at least about three quarters of a liter per minute during a fifteen minute period.

69. The bag assembly as claimed in claim 68 wherein:

the bag is constructed from a resilient polymeric film material selected from the group consisting of polyolefins, polyvinyl chlorides and ethylene vinyl acetates.

70. The bag assembly as claimed in claim 68 wherein:

the bag includes a spout for enabling flow of the eyewash fluid out of the bag.

71. The bag assembly as claimed in claim 68 wherein:

the storage bag has a structural top of rigid plastic and lower resilient sheet; the structural top includes a pair of outer hand holding slots and an inner pair of support engaging slots.

72. The bag assembly as claimed in claim 71 wherein:

the resilient sheets are made of a medical grade polymeric film material selected from the group consisting of polyolefins, polyvinyl chlorides and ethylene vinyl acetates, having a thickness in a range of about 5 to about 20 mils.

73. The bag assembly as claimed in claim 72 wherein:

the polyolefin film provides a pressure on the eye wash fluid inside the bag to enable said generally constant flow of said fluid from said bag during use at a rate of about three-quarters of a liter per minute during a fifteen minute period and to cause the fluid to be substantially evacuated from the bag during said fifteen minute period.

74. The bag assembly as claimed in claim 73 wherein:

the bag including the structural top is about nineteen inches high and about twenty-one inches wide when empty.

75. The bag assembly as claimed in claim 68 wherein:

the bag contains between about eleven and about fifteen liters of eye wash solution.

76. The bag assembly as claimed in claim 75 wherein:

the bag contains at least about eleven and one-quarter liters of eye wash solution.

77. The bag assembly as claimed in claim 76 wherein:

the bag contains a sterile solution and the bag is sealed.